

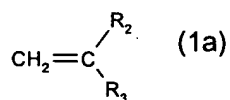
CLAIM AMENDMENTS

Please amend the Claims 1-2, 5, 8, and 9 and add claims 15-18 as follows:

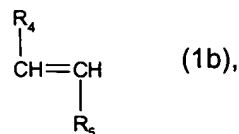
1. (Currently amended) A crosslinkable or polymerizable prepolymer that is obtained by
 - (a) copolymerizing at least one hydrophilic monomer having one first ethylenically unsaturated group [double bond] and at least one crosslinker comprising two or more second ethylenically unsaturated groups [double bonds] in the presence of a chain transfer agent comprising a chain transfer group and a first reactive group to obtain a copolymerization product with first reactive groups, wherein said at least one crosslinker is a polysiloxane, a perfluoroalkyl polyether, or a polysiloxane/perfluoroalkyl polyether block copolymer, wherein the hydrophilic monomer is a monomer which, when polymerized, gives a homopolymer which is water-soluble or can absorb at least 10% by weight of water [~~which in addition to the chain transfer group contains a functionality reactive with the organic compound of step (b)~~]; and
 - (b) reacting an organic compound with the copolymerization product to form the crosslinkable or polymerizable prepolymer having third ethylenically unsaturated groups, wherein the organic compound comprises [~~having an~~] a third ethylenically unsaturated group and a second reactive group, wherein the second reactive group of the organic compound [~~which~~] reacts with one of the first reactive groups of the copolymerization product [~~said functionality introduced by the chain transfer agent in step (a)~~];

~~wherein the crosslinker according to step (a) is a polysiloxane, perfluoroalkyl polyether or polysiloxane/perfluoroalkyl polyether block copolymer comprising in each case two or more ethylenically unsaturated double bonds;~~

~~wherein the hydrophilic monomer is a monomer which, when polymerized, gives a homopolymer which is water-soluble or can absorb at least 10% by weight of water.]~~
2. (Currently amended) A prepolymer according to claim 1, wherein the hydrophilic monomer according to step (a) is a radical of formula



or



wherein R₂ is hydrogen or C₁-C₄-alkyl;

R₄ is C₁-C₄-alkyl, phenyl or a radical -C(O)OY₉, wherein Y₉ is hydrogen or unsubstituted or hydroxy-substituted C₁-C₄-alkyl;

R₅ is a radical -C(O)Y₉' or -CH₂-C(O)OY₉' wherein Y₉' independently has the meaning of Y₉;

and

R₃ is

- (i) a non-ionic substituent selected from the group consisting of

- a) C₁-C₆-alkyl which is substituted by one or more same or different substituents selected from the group consisting of -OH and -NRR', wherein R and R' are each independently of another hydrogen or unsubstituted or hydroxy-substituted C₁-C₆-alkyl or phenyl;
- b) phenyl which is substituted by hydroxy or -NRR', wherein R and R' are as defined above;
- c) a radical -COOY, wherein Y is C₁-C₂-alkyl, C₁-C₁₂[₄]-alkyl which is substituted by hydroxy, -NRR', a radical -O-(CH₂CH₂O)₁₋₂₄-E, or a radical -NH-C(O)-O-G, wherein R and R' are as defined above, wherein E is hydrogen or C₁-C₆-alkyl, wherein -O-G is the radical of a saccharide with 1 to 8 sugar units or is a radical -O-(CH₂CH₂O)₁₋₂₄-E;
- d) -CONY₁Y₂, wherein Y₁ and Y₂ are each independently hydrogen, C₁-C₄-alkyl, C₁-C₁₂-alkyl which is substituted by hydroxy, C₁-C₄-alkoxy, a radical -CH(OR₁₈)₂, C₁-C₄-alkyl, C₂-C₅-alkanoyl, or a radical -O-(CH₂CH₂O)₁₋₂₄-E, wherein R₁₈ is hydrogen, C₁-C₄-alkyl or C₂-C₅-alkanoyl, wherein E is as defined above, or Y₁ and Y₂ together with the adjacent N-atom form a five- or six-membered heterocyclic ring having no additional heteroatom or one additional oxygen or nitrogen atom; and
- e) a radical -OY₃, wherein Y₃ is hydrogen, C₁-C₂-alkyl, acetyl, C₁-C₁₂-alkyl which is substituted by -NRR', or a radical -C(O)-C₁-C₂-alkyl, wherein R and R' are as defined above or together are a five- to seven-membered heterocyclic radical having at least one N-atom and being bound in each case via said nitrogen atom;
- (ii) an anionic substituent selected from the group consisting of
- f) C₁-C₆-alkyl which is substituted by -SO₃H, -OSO₃H, -OPO₃H₂ and -COOH;
- g) phenyl which is substituted by one or more same or different substituents selected from the group consisting of -SO₃H, -COOH, -OH and -CH₂-SO₃H;
- h) -COOH;
- i) a radical -COOY₄, wherein Y₄ is C₁-C₂₄-alkyl which is substituted by -COOH, -SO₃H, -OSO₃H, -OPO₃H₂, or a radical -NH-C(O)-O-G', wherein G' is the radical of an anionic carbohydrate;
- j) a radical -CONY₅Y₆, wherein Y₅ is C₁-C₂₄-alkyl which is substituted by -COOH, -SO₃H, -OSO₃H, or -OPO₃H₂, wherein Y₆ independently has the meaning of Y₅ or is hydrogen or C₁-C₁₂-alkyl; and
- k) -SO₃H or a salt thereof;
- (iii) a cationic substituent selected from the group consisting of
- l) C₁-C₁₂-alkyl which is substituted by a radical -NRR'R''An⁺, wherein R, R' and R'' are each independently of another hydrogen or unsubstituted or hydroxy-substituted C₁-C₆-alkyl or phenyl, wherein An⁺ is an anion; and

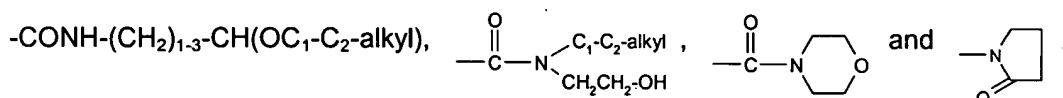
m) a radical $-\dot{C}(O)OY_7$, wherein Y_7 is C_1 - C_{24} -alkyl which is substituted by $-NRR'R''An^-$ and is further unsubstituted or substituted by hydroxy, wherein R , R' , R'' and An^- are as defined above; or

(iv) a zwitterionic substituent $-R_1-Zw$, wherein R_1 is a direct bond or a carbonyl, carbonate, amide, ester, dicarboanhydride, dicarboimide, urea or urethane group, and wherein Zw is an aliphatic moiety comprising one anionic and one cationic group each.

3. (previously presented) A prepolymer according to claim 1, wherein the hydrophilic monomer according to step (a) is a radical of formula

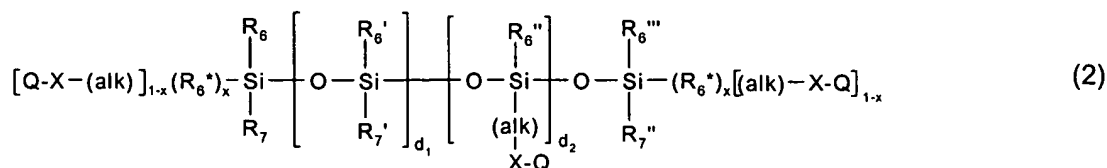


wherein R_2 is hydrogen or methyl and R_3 is a non-ionic substituent selected from the group consisting of $-\text{COO}-C_1-C_2\text{-alkyl}$, $-\text{COO}-(CH_2)_{2-4}-OH$, $-\text{CONH}_2$, $-\text{CON}(CH_3)_2$, $-\text{CONH}-(CH_2)_2-OH$,



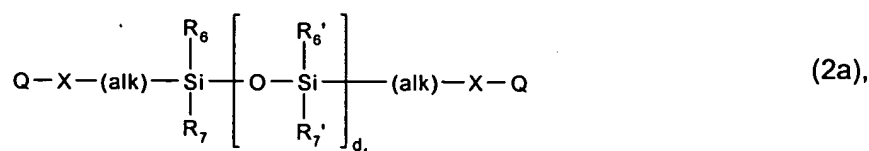
4. (canceled)

5. (Currently amended) A prepolymer according to claim 1, wherein the crosslinker according to step (a) is a polysiloxane of formula

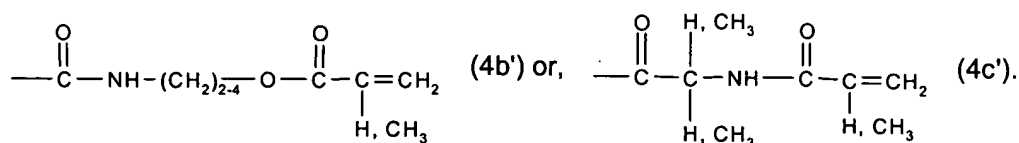
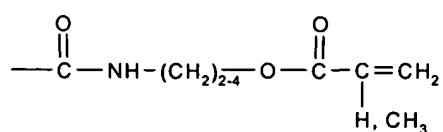
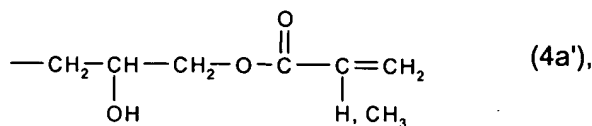
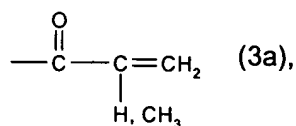


in which (alk) is alkylene having up to 20 carbon atoms which may be interrupted by $-O-$; X is $-O-$ or $-NR_8-$, R_8 is hydrogen or C_1 - C_6 -alkyl, Q is an organic radical comprising a crosslinkable or polymerizable group, 80-100% of the radicals R_6 , R_6' , R_6'' , R_6''' , R_6^* , R_7 , R_7' and R_7'' , independently of one another, are C_1 - C_8 -alkyl and 0-20% of the radicals R_6 , R_6' , R_6'' , R_6''' , R_6^* , R_7 , R_7' and R_7'' , independently of one another, are unsubstituted ~~[unsubstituted]~~ or C_1 - C_4 alkyl- or C_1 - C_4 -alkoxy-substituted phenyl, fluoro(C_1 - C_{18} -alkyl), cyano(C_1 - C_{12} -alkyl), hydroxy- C_1 - C_6 -alkyl or amino- C_1 - C_6 -alkyl, x is the number 0 or 1, d_1 is an integer of from 5 to 700, d_2 is an integer from 0 to 8 if x is 0, and is 2 to 10 if x is 1, and the sum of (d_1+d_2) is from 5 to 700.

6. (original) A prepolymer according to claim 1, wherein the crosslinker according to step (a) is a polysiloxane of formula



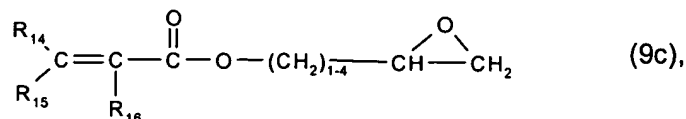
wherein R_6 , R_6' , R_7 and R_7' are each methyl, d_1 is an integer from 10 to 300, (alk) is linear or branched C_2 - C_6 alkylene or a radical $-(CH_2)_{1-3}-O-(CH_2)_{1-3}-$, X is -O- or -NH- and Q is a radical of the formula

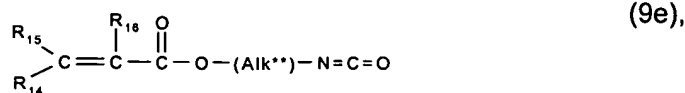
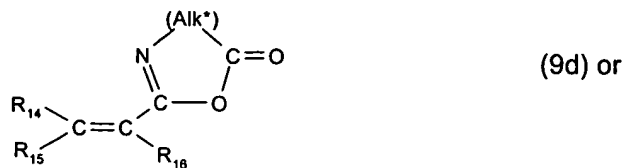


7. (original) A prepolymer according to claim 1, wherein the functional chain transfer agent used in step (a) is an organic primary thiol having a hydroxy, amino, N- C_1 - C_6 -alkylamino or carboxy group.

8. (Currently amended) A prepolymer according to claim 1, ~~wherein prepolymer according to any one of claims 1 to 6,~~ wherein, the components in step (a) are used in a molar ratio of from 0.5 to 5 equivalents chain transfer agent : 1 equivalent crosslinker : 5 to 60 equivalents hydrophilic monomer(s).

9. (Currently amended) A prepolymer according to claim 1, wherein the ~~copolymer of step (a) is reacted in step (b) with a~~ organic compound is described by [of] formula





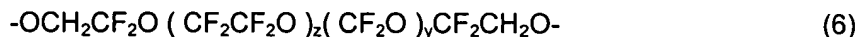
wherein R_{13} is halogen, hydroxy, unsubstituted or hydroxy-substituted C_1 - C_6 -alkoxy or phenoxy, R_{14} and R_{15} are each independently of the other, hydrogen, C_1 - C_4 -alkyl, phenyl, carboxy or halogen, R_{16} is hydrogen, C_1 - C_4 -alkyl or halogen, R_{17} and R_{17}' are each an ethylenically unsaturated radical having from 2 to 6 C-atoms, or R_{17} and R_{17}' together form a bivalent radical - $C(R_{14})=C(R_{16})$ - wherein R_{14} and R_{16} are as defined above, and (Alk*) is C_1 - C_6 -alkylene, and (Alk**) is C_2 - C_{12} -alkylene.

10 – 14. (Canceled)

15. (New) A prepolymer according to claim 1, wherein the crosslinker is a perfluoroalkyl polyether of formula



wherein $n \geq 1$, each PFPE may be the same or different and is a perfluorinated polyether of formula

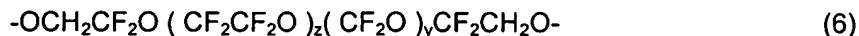


wherein the CF_2CF_2O and CF_2O units may be randomly distributed or distributed as blocks throughout the chain and wherein z and y may be the same or different such that the weight average molecular weight of the perfluoropolyether is in the range of from 500 to 4,000; wherein L is a difunctional linking group; and wherein Q is an organic radical comprising a crosslinkable or polymerizable group.

16. (New) A prepolymer according to claim 1, wherein the crosslinker is a macromonomer of the formula (5a)



wherein Q is an organic radical comprising a crosslinkable or polymerizable group; PFPE is a perfluorinated polyether of formula (6)



wherein z and y may be the same or different such that the molecular weight of the perfluoroalkyl polyether is in the range of from 500 to 2,500.

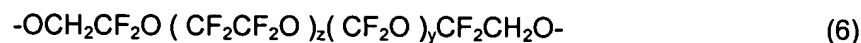
17. (New) A prepolymer according to claim 1, wherein the crosslinker is a polysiloxane/perfluoroalkyl polyether block copolymer of the formula

wherein

L is a difunctional linking group;

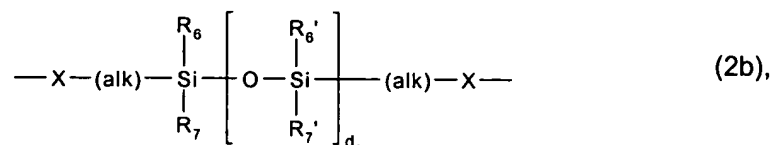
Q is an organic radical comprising a crosslinkable or polymerizable group;

PFPE is a perfluorinated polyether of formula (6)



in which z and y may be the same or different such that the molecular weight of the perfluoroalkyl polyether is in the range of from 500 to 2,500; and

M is a radical of formula (2b)



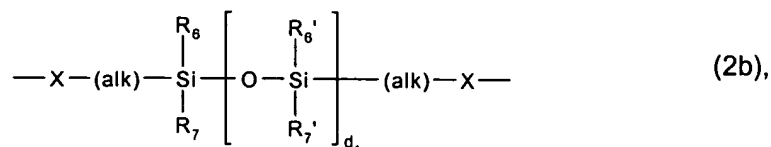
in which R_6 , R_6' , R_7 and R_7' are each methyl, d_1 is an integer from 10 to 300, (alk) is linear or branched $\text{C}_2\text{--C}_6$ alkylene or a radical $\text{---(CH}_2\text{)}_{1-3}\text{---O---(CH}_2\text{)}_{1-3}\text{---}$, X is ---O--- or ---NH--- , wherein the weight average molecular weight of the segment of formula (2b) is in the range of from 180 to 6000.

18. (New) A prepolymer according to claim 1, wherein the crosslinker is a polysiloxane of formula (2c)



wherein

$(\text{PDMS})_1$ and $(\text{PDMS})_2$ are, each, independently of the other, a radical of formula (2b)



in which R_6 , R_6' , R_7 and R_7' are each methyl, d_1 is an integer from 10 to 300, (alk) is linear or branched $\text{C}_2\text{--C}_6$ alkylene or a radical $\text{---(CH}_2\text{)}_{1-3}\text{---O---(CH}_2\text{)}_{1-3}\text{---}$, X is ---O--- or ---NH--- , wherein the weight average molecular weight of the segment of formula (2b) is in the range of from 180 to 6000;

Q is an organic radical comprising a crosslinkable or polymerizable group; and

L is a difunctional linking group.